

PMS13

THE EFFICACY AND SAFETY OF ABATACEPT, ADALIMUMAB, ETANERCEPT AND TOCILIZUMAB ARE COMPARABLE IN POLYARTICULAR JUVENILE IDIOPATHIC ARTHRITIS

Rathi H¹, Pennington B², Amadi A³, Lister S³, Nanuwa K³¹BresMed Health Solutions, Goa, India, ²BresMed, Panaji, India, ³Bristol-Myers Squibb, Uxbridge, UK

OBJECTIVES: For patients with polyarticular juvenile idiopathic arthritis (pJIA), a published indirect comparison demonstrated that abatacept, adalimumab and etanercept are similarly efficacious, as measured by preventing disease flare after response to treatment. The objective of this study was to indirectly assess the efficacy and safety of abatacept, adalimumab and etanercept compared to tocilizumab in patients with pJIA. **METHODS:** There have been no head-to-head trials comparing biological disease modifying anti-rheumatic drugs (bDMARDs) in patients with pJIA. A published systematic review and indirect comparison did not include tocilizumab. Therefore, we conducted an indirect comparison, using the Bucher method, to estimate the efficacy of tocilizumab compared with the other bDMARDs. The definition of pJIA and baseline characteristics of patients in the tocilizumab trial were similar to the trials included in the published study. We also compared the incidence of serious adverse events (SAEs) during the double-blind phase of the trials for each bDMARD versus placebo using Fisher's exact test. **RESULTS:** The relative risk of preventing disease flare after response to treatment for abatacept, adalimumab and etanercept versus tocilizumab in patients with pJIA was 0.71 (95% CI: 0.35-1.43), 1.10 (95% CI: 0.64-1.91) and 0.65 (95% CI: 0.30-1.43), respectively. The incidence of SAEs for each bDMARD was not significantly different when compared to placebo, with Fisher's exact test p-value as 0.50, 0.49, 0.24 and 1.00, for abatacept, adalimumab, etanercept, and tocilizumab, respectively. **CONCLUSIONS:** We conclude that abatacept, adalimumab, etanercept and tocilizumab have comparable efficacy in pJIA in preventing disease flare after response to treatment. The incidence of SAEs for each bDMARD was not statistically significantly different from that of placebo, and therefore was likely to be generally comparable between the bDMARDs. As the efficacy and safety of these bDMARDs are comparable, cost-minimisation analysis is an appropriate method for economic evaluation of these treatments. 1 Otten MH, et al. *AnnRheumDis* 2013;72:1806–1812

PMS14

A NETWORK METANALYSIS COMPARING THE EFFICACY OF BIOLOGICS FOR THE TREATMENT OF EARLY RHEUMATOID ARTHRITIS

Bizzi E¹, Petrella L², Integlia D³, Migliore A⁴¹San Pietro Fatebenefratelli Hospital, Rome, Italy, ²Sapienza University, Rome, Italy, ³ISHEO, Rome, Italy, ⁴S. Pietro Fatebenefratelli Hospital, Rome, Italy

OBJECTIVES: Rheumatoid arthritis (RA) is a chronic disease characterized by inflammation of the synovial tissue leading to joint destruction. The introduction of biologic agents dramatically changed the prognosis of RA, especially when administered in early RA (ERA). At now there are 8 different biologic agents approved for the therapy of ERA. The aim of this Bayesian metanalysis is to compare and rank biologics indicated for ERA. **METHODS:** A literature search was performed to identify articles reporting data from RCTs on the use of biologic approved for ERA. MTC results are reported as the relative risk of response (RR), intended as the capacity of inducing an ACR20, ACR50 and ACR70 response for each biologic associated to MTX compared with MTX. **RESULTS:** A total of 10 scientific papers were identified. Studies differed for length of followup and consequently only data at 12 weeks were taken into account. All biologic agents, associated to MTX, proved to be more efficacious in inducing an ACR20, ACR50 and ACR70 response respect to MTX. When comparing results obtained by different drugs, Etanercept proved to be the biologic agent that represents the best choice for obtaining ACR20 and ACR50 response with a probability of 62,95% and 37,1% respectively, while Adalimumab represents the best choice for inducing ACR70 response with a probability of 33,28%. **CONCLUSIONS:** In our MTC on RCTs on the use of biologic agents used in ERA, we identified Adalimumab as the more probably best choice in obtaining the result of ACR70 response and for such reason this drug should be considered as a first line therapy in patients affected by ERA. Etanercept proved to be the more probably best choice in obtaining ACR50 and ACR20 response, and for such reason it should be considered as the second line choice in patients affected by early RA.

PMS15

MIXED TREATMENT COMPARISON TO RANK ANTIRESORPTIVE AGENTS IN PREVENTING NEW NON VERTEBRAL FRACTURES IN POSTMENOPAUSAL OSTEOPOROSIS

Massafra U¹, Integlia D², Broccoli S³, Migliore A¹¹S. Pietro Fatebenefratelli Hospital, Rome, Italy, ²ISHEO, Rome, Italy, ³Bioikos Pharma, Bologna, Italy

OBJECTIVES: Osteoporotic non Vertebral fractures (NVF) resulted the more frequent kind of fracture in large population studies, with a severe incidence on annual costs for the health system and an increased risk of death for fractured patients. The burden of fracture is expected to increase with an ageing population. Data from head to head RCT focused on reduction of incidence of non vertebral fracture among available antiresorptive agents are not available. This MTC aims to compare alendronate, risedronate, ibandronate, zoledronate and denosumab on completion of preventing osteoporosis NVF in a Bayesian metaanalysis assessing indirect comparisons. **METHODS:** A systematic research for RCT involving alendronate, risedronate, ibandronate, zoledronate and denosumab was conducted using databases (CENTRAL, CINAHL, Embase, HMIC, MEDLINE and PsycINFO). MTC results are reported as the relative risk of response (RR), intended as the capacity of reducing NVF for each antiresorptive agent compared with placebo. **RESULTS:** Nine RCTs were identified. Three trials compared Alendronate versus placebo, 2 trials compared Risedronate vs placebo, 2 trials Zoledronate vs placebo, and one trial for Ibandronate and denosumab. Risedronate had the highest probability (72%) of being the most effective treatment, followed by Zoledronate (22%), Denosumab (4,60%) and then alendronate (1%) and ibandronate (0.10%). Comparisons of any

antiresorptive agents against each other didn't evidence a statistically significant difference. **CONCLUSIONS:** The results of this MTC can suggest that Risedronate, compared to placebo, is expected to provide the highest rate of reduction in NVF in women affected by postmenopausal OP. However, the mixed treatment comparisons among alendronate, risedronate, ibandronate, zoledronate and denosumab did not evidence a statistically significant difference.

PMS16

NEW POSSIBILITY FOR TESTING THE DYNAMIC STABILITY OF THE TRUNK AND LOWER EXTREMITIES

Steinhausz V¹, Sió E¹, Gombos G¹, Bajsz V¹, Tóth E², Sömjén K³, Ács P⁴, Boncz I⁴¹University of Pécs, Zalaegerszeg, Hungary, ²Budai Physiotherapy Clinic, Budapest, Hungary,³Elisabet Hospital, Zirc, Hungary, ⁴University of Pécs, Pécs, Hungary

OBJECTIVES: The Start Excursion Balance test (SEBT) is commonly used to assess the dynamic stability of the trunk and lower extremities in which eight times three (8x3) measurements are made, this means a total of 48 measurements on the two sides. The aim of this research is to create a simpler and faster balance test and to compare this with other validated balance tests. **METHODS:** The study was implemented in August 2014 at the University of Pécs Faculty of Health Sciences Zalaegerszeg Training Centre in which 11 adult and 30 youth basketball players players were involved (mean age: 14.9 year, mean height: 179.9cm). The Dynamic Lateral Balance Test (DLBT) is based on a newly developed methodology and use a simple calliper to measure the values. To assess the strength of the relationship between the specific tests (SEBT, Flamenco Test and DLBT) Pearson correlation coefficients were computed. Statistical significance was established at the α -level of 0.05 for all analyses, and IBM SPSS, Inc., 20.0v was used. **RESULTS:** We found moderate correlation between the values of the DLBT and the body height ($p < 0.001$), therefore we expressed the values correlated with body height (DLBT / body height x 100). There was a moderate negative correlation between the values of the Flamenco Test and the DLBT test (left side: $r = -0.424$, $p = 0.006$; right side: $r = -0.432$, $p = 0.005$). There was a moderate positive correlation between the DLBT and the SEBT regarding some directions ($p < 0.05$), for example: right DLBT – right posteromedial: $r = 0.480$, $p = 0.002$; left DLBT – left posteromedial: $r = 0.491$, $p = 0.002$. **CONCLUSIONS:** The present pilot study confirmed the correlation between the newly developed DLBT and other validated tests; consequently this new test can become a fast, simple and informative solution for testing the dynamic balance.

PMS17

HEALTHCARE PATHWAYS AND BURDEN OF DISEASE OF PATIENTS WITH PSORIASIS AND PSORIATIC ARTHRITIS

Rossi E¹, Cataudella S¹, Calabria S², Rielli R¹, Esposito I³, Martini N³¹CINECA Interuniversity Consortium, Casalecchio di Reno, Italy, ²CORE, Collaborative Outcome Research, Bologna, Italy, ³Accademia Nazionale di Medicina, Roma, Italy

OBJECTIVES: Psoriasis and Psoriatic Arthritis (PsA) are chronic, inflammatory, autoimmune diseases that negatively impact on health-related quality of life. The aim of this study was to analyze the healthcare profile and the overall cost of patients with Psoriasis/PsA in the real clinical practice. **METHODS:** From ARNO Observatory database we carried out a record linkage analysis of disease exemptions, drug prescriptions and specialist services on 2.988.195 subjects, with available, complete and good quality data. Patients with Psoriasis/PsA were collected from 01/01/2009 to 31/12/2011 (accrual period) and followed up to 2 years, to analyze specific treatments (DMARDs, biological, topical), therapy switches, community and hospital cares and their expenditure (mean/patient). **RESULTS:** Of 2.988.195 subjects, 6.030 met two or more inclusion criteria (53% men, mean age 54.5±14.6 years). During the 2-year follow-up non-biological and biological drugs were prescribed respectively to 2.738 (45%) and to 902 (15%) patients. 591 took both: 390 (66%) started DMARDs then switched to biological treatments in 7.6 months on average. 2.783 (46%) patients received "other drugs", mostly NSAIDs, Corticosteroids (systemic and dermatological use), Penicillins and Quinolone antibacterials. 950 patients (16%) were discharged from ordinary and daily hospitalizations mainly for skin, connective tissue and cardiovascular (CVD) diseases. CVD and Neoplasia (8195€/patient/2-year follow-up) were between the most expensive causes of ordinary admissions. Psychiatric disorders caused the longest stay in-hospital (33.5 mean days/patient). 51.5% of patients received specialist healthcare services (blood count and liver enzymes). Patients treated with biological drugs were more expensive than those treated with DMARDs and topical therapies, for pharmaceutical, in-hospital and specialist cares (7.978€/patient/year of follow-up). **CONCLUSIONS:** This assessment of healthcare profiles of patients with Psoriasis/PsA in the real in-hospital and community Italian settings provided evidence that patients treated with biological therapies are those with a more compromised health that induces high costs on all aspects of their care.

PMS18

CHARACTERIZATION OF OSTEOPOROSIS IN PORTUGAL - TREATMENT PATTERNS AND REASONS FOR UNDER-TREATMENT AND NON-PERSISTENCE WITH PHARMACOLOGICAL TREATMENTS

Rodrigues A¹, Laires PA², Gouveia N¹, Eusébio M¹, Canhão H³, Branco JC¹¹Sociedade Portuguesa de Reumatologia, Lisbon, Portugal, ²Merck Sharp & Dohme, Oeiras, Portugal, ³Faculdade de Medicina da Universidade de Lisboa, Lisbon Academic Medical Center, Lisbon, Portugal, Lisbon, Portugal

OBJECTIVES: The epidemiology and treatment patterns of osteoporosis are poorly understood in Portugal. Available evidence suggests that many post-menopausal (PM) women with osteoporosis are not pharmacologically treated for this condition (i.e. under-treatment). Furthermore, high levels for treatment discontinuation (i.e. non-persistence) are still reported in the clinical practice. We aimed to describe the treatment patterns of PM osteoporosis and to understand reasons for under-treatment and non-persistence in Portugal. **METHODS:** This is an observational, cross-sectional study, nested in a patient registry database developed by the Portuguese Society of Rheumatology, and conducted during 2014. Complementary